

**Model Question Paper**

**For Kashmir Division 2010 Regular Exam Only**

**Roll No.....**

**Subject                      GEOLOGY**

**Maximum Marks --- 60**

**Time Allowed – 3 Hours (Fifteen Minutes Extra to read the question paper)**

**Do questions from Part A or Part B or from both Part A and B Part of maximum 60 marks as per your preparation.**

**Part A**

**Note :** All questions are compulsory. Write their answers in your Answer-book.

**(Long Answer Type Questions)**

1. Discuss various causes of Earthquakes alongwith their Geological effects with special reference to recent earthquake in parts of J&K State.

*Or*

Define Volcano. Draw its diagram. Write an essay on various Volcanic products.

5

2. Give a detailed account of Pyroclastic materials thrown out by a Volcano.

*Or*

Define Seismology. Give Richter scale of Earthquake intensity in detail.

5

3. Name the various methods for the determination of age of the Earth. Describe any one of the Radioactive methods.

P. T. O.

**Or**

On the basis of Seismological studies, give a brief description of Interior of the Earth. 5

4. Describe in detail Tidal hypothesis of origin of the Earth.

**Or**

Explain the Nebular Hypothesis regarding the origin of the Earth. Also add a note on its criticism. 5

5. Describe the Morphological features of typical Lamellibranchia. Draw its diagram and also label its parts.

**Or**

Explain with a neat sketch, the Morphology of Trilobita. 5

**(Short Answer Type Questions)**

6. Write short description of Focus and Epicentre with the help of neat diagram. 3  
*Epicentre*  
*Focus*

7. Write down a brief description of Volcanic belts of the world. 3

8. Describe Schmidt's Hypothesis in brief. 3

9. Explain, how rate of Sedimentation is used for the determination of Age of the Earth. 3

10. Give the Stratigraphic range and Morphological features of Calymene. 3  
*Silurian to Middle Devonian*

11. Write a brief note on Head shield of Trilobita. 3

12. Define in brief three layers of Interior of the Earth. 3

(Very Short Answer Type Questions)

13. The following very short answer type questions of two marks, each may be answered in a few words or a few sentences or as may be required.

(a) Distinguish between Acid Lava and Basic Lava. *acid lava/liquid thin flow heavy wt melts at low temp*

(b) Write down briefly the drawbacks of Tidal Hypothesis.

(c) Give a brief note on Half-life period. What is half-life period of  $C_{14}$  ?

(d) Give the morphological features of Paradoxides. *5730yrs*

(Objective Type Questions)

14. Choose the correct/most appropriate answer and write it in your Answer-book :

(i) The Core of the Earth is composed of

A. Na, K, Na and K

B. Mg and Si

C. Nickel and Iron ✓

D. None of these.

(ii) Volcanoes which show volcanic activity are called

A. Extinct volcanoes

B. Active volcanoes ✓

C. Dormant volcanoes

D. Volcanic Bombs.

(iii) The Science which deals with Earthquakes, is called

A. Seismology ✓

B. Mineralogy

C. Petrology

D. Hydrology.

(iv) Tidal Hypothesis was first proposed by

A. Immanuel Kant

B. Jeans and Jeffreys ✓

C. Schmidt's

D. Lyttleton. 1

(v) Agnostus is a

A. Lamellibranch

B. Gastropod

C. Brachiopod

D. Trilobite. ✓ 1

(vi) Brachiopoda have

A. two valves ✓

B. only one valve

C. three valves

D. four valves. 1

## Part B

Note : Attempt all questions.

### (Long Answer Type Questions)

1. Give the Physical characters, Chemical composition and mode of occurrence of Monoclinic pyroxene group of Minerals.

*Or*

Describe in detail Amphibole group of Minerals.

5

2. Explain the Tetragonal system. Give its symmetry and detailed account of any three forms.

*Or*

Give the elements of Symmetry of normal class of Cubic system. Mention in detail any three forms of this system.

5

3. Describe in detail Copper deposits of India.

*Or*

Give the Physical properties, Chemical composition and uses of Ores of Aluminium in India.

5

( 2 )

4. Define Calorific value. Explain in detail the distribution of Coal in India.

*Or*

Describe in detail the Mineral wealth of Jammu and Kashmir State. 5

5. Define in detail the term Fault. Explain in detail its three types citing examples with special reference to J&K State.

*Or*

What is Fold ? Explain in detail with suitable diagrams any three kinds of Fold citing examples from India. 5

**(Short Answer Type Questions)**

6. Give the Physical characters of the following :

(i) Orthoclase

(ii) Albite

(iii) Microcline. 3

7. Write the elements of Symmetry of normal class of Hexagonal system. 3

8. Explain in brief the uses of Iron and Manganese. 3

9. Describe in brief the distribution of Petroleum in India. 3

10. Explain in concise form Miller system of Indices. 3

11. Give the criteria of recognition of Folds in the field. 3

12. Describe the importance of Unconformities. 3

**(Very Short Answer Type Questions)**

13. The following very short answer type questions of two marks, each may be answered in a few words or a few sentences or as may be required.

(a) Discuss in brief Ore and Gangue Minerals. 2

- (b) Define Joints. Name various types of Joints.
- (c) Name any four Coal localities of J&K State.
- (d) Name any two Minerals which crystalises in Cubic system.

**(Objective Type Questions)**

14. Choose the correct/most appropriate answer and write it in your Answer-book

(i) The hardness of Fluorite is

- A. 2
- B. 3
- C. 4
- D. 5.

(ii) Sapphire is found in

- A. Zanskar
- B. Gulmarg
- C. Nagrota
- D. Padder.

(iii) A Crystal of a Cube has

- A. 8 faces
- B. 6 faces
- C. 12 faces
- D. 9 faces.

(iv) In which year the Oil exploration started in Assam ?

- A. 1625
- B. 1725
- C. 1825
- D. 1925.

(v) Octahedron has

- A. 6 faces
- B. 7 faces
- C. 8 faces
- D. 9 faces.

(vi) Gold as placer deposits is found in

- A. Poonch
- B. Kathua
- C. Ladakh
- D. Udhampur.